THOROUGHFARE PRIORITY NEEDS AND COST ESTIMATES

The recommendations suggested in the Farmville Urban Area Thoroughfare Plan cannot be constructed all at once. The cost would be overwhelming and the need for some of the recommendations is not immediate. In an effort to distinguish which recommendations should be given priority, a benefits matrix model is applied. Whereas, an assessment of the benefits expected from each project is compared to the projected costs.

There are five principal measures of benefits used in this model. These measures provide a basis for evaluating how well projects meet their objectives. They are listed below.

1) User Benefits
2) Costs
3) Economic Development Potential
4) Environmental Impact
5) Relationship of Project to State Arterial System

User benefits are computed from the savings an improvement project brings through reduced vehicle operating costs, travel costs, and accident costs. This savings is compared to a do-nothing alternative.

Construction costs and right-of-way costs are the only costs utilized in the benefits matrix model. Construction costs consists of all costs to construct a project. Whereas right-of-way costs include relocation costs of residences, businesses and utilities, as well as, land costs.

Construction costs can offset the benefits of a project. Despite a projects high projected benefits, excessive construction costs may prove unreasonable to construct. The construction costs were estimated by the Preliminary Estimates Section of the Design Services Unit of NCDOT. The right-of-way costs are estimated as an average of three sources. The sources were Farmville's Planning Director, NCDOT's Area Appraisal office, and a local Real Estate office.

Economic development potential and environmental factors are measured using probability. Economic probability is established as a result of the development an improvement will bring to the area. A project is successful when it stimulates economic development in the area, increases level of service, or makes land accessible. The probability is rated on a scale from 0.00 (none) to 1.00 (excellent). The environmental factors measured were discussed in detail in Chapter 5. However, a summation of both positive and negative impact probabilities provides a measure of the relative environmental impact of a project.

Table 9 lists the recommended thoroughfare priority needs for the Farmville Urban Area Thoroughfare Plan. The Table evaluates the proposed Farmville Urban Area projects with respect to user benefits, estimated costs, probability of economic development, and environmental impact. As conditions are constantly changing, the priorities should be reevaluated prior to construction.